#### **Generalized Nutrient Criteria Workplan (2008-2010)**

(June 5, 2008)

# 1. Develop Nutrient Criteria Affordability Thresholds for use in Nutrient Standards Variances

- a. Complete internal discussions and refinement of EPA methodology with Paul LaVigne and Jeff Blend. **Timeline: May 29-July 15, 2008**
- b. Present results of internal staff work to management for further recommendation. **Timeline: July 15-July 30, 2008**:
- c. Assemble advisory group to provide DEQ input on the affordability thresholds and methods proposed by DEQ. Group will probably meet 2-3 times to complete their work. **Timeline: July 30-November 30, 2008.**

#### 2. Complete Task Order 5 with ICF International

a. Level III *vs.* level IV ecoregion stratification, final wadable stream N and P criteria, statistical assessment tools to confirm standards compliance (for both 303(d) listing and permits), etc. **Timeline: June 30, 2008.** 

# 3. Write a Department White Paper (Position Paper) Describing the Technical Basis of the Numeric Nutrient Criteria for Statewide Wadeable Streams

- a. I will write a concise paper describing the multiple lines of evidence (reference, stressor-response, public-opinion surveys, changepoint thresholds) used to develop nutrient criteria relative to key fishable/swimmable uses. It will detail the ecoregional stratification approach, and contain an appendix describing how criteria were established for prairie wadable streams. Dr. Vicki Watson and ICF International (Arun Varghese, Josh Cleland) will assist. Timeline: June1-Aug 30, 2008.
- b. White Paper will be provided to an out-of-state academic review committee being assembled independently by region VIII EPA. Committee will review our approach for technical quality and report back. **Timeline:** August 30-October 15, 2008.
- c. Assuming academic review finds the work acceptable, White Paper will be released to general public for their review and consideration.

  Timeline: post on web by November 15, 2008.

#### 4. Assist with Legislative Bill for Variances to Numeric Nutrient Standards

a. Assuming DEQ management decides that a bill in the 2009 legislature is needed to confer rule-making authority to the BER, I will assist when and where needed. **Timeline: January 1-April 30, 2009** 

# 5. Develop the Rule-based and Guidance-based Components of the Numeric Nutrient Standards for Wadable Streams

a. Finalize the guidance document detailing how staff will determine compliance with the standards. **Timeline: September 2008-March 2009** 

- b. Create a "DEQ-10" circular containing the nutrient standards, by ecoregion and time-of-applicability breakout, and a structure to document any variances that may be developed. **Timeline: January 2009-June 2009**.
- c. Develop an alternatives-analysis guidance document for determining when variances can be used (as opposed to other approaches to meeting the criteria). Document will also detail factors to consider when re-justifying variances. **Timeline: February 2009-June 2009.**

## 6. Pre Ruling Making Public Outreach Period (Timeline: June 30, 2009-October 30, 2009)

- a. Completely update the WPCAC on all details of the criteria and implementation procedures
- b. Post all relevant materials on a DEQ webpage devoted strictly to nutrient
- c. Inform individuals on the interested parties list that rule making for nutrient standards is pending
- d. Carry out any other public outreach deemed necessary by Management

### 7. Begin Rule Making Process Before the BER.

a. All components detailed above should be completed before this occurs. **Timeline: August 2009-December 2009.** 

### 8. Complete 1<sup>st</sup> Large River Nutrient Criteria Project (lower Yellowstone River)

- a. Complete dye-study with USGS. Timeline: August-October 2008.
- b. Complete model calibration. Timeline: October 2008.
- c. Complete model validation. Timeline: November 2008.
- d. Final report, and conclusion as to whether this modeling approach to numeric nutrient criteria is feasible for this and other large rivers. **Timeline: March 2009.**

### 9. Begin Lake Stratification Analysis for Determining Western Montana Lake Nutrient Criteria

- a. Analyze key driving variables influencing trophic state of lakes using data collected by DEQ 2003-2008 and other data. **Timeline: October 2009-March 2010.**
- b. Further analyze lake data and determined what constitutes a use impact and then begin criteria development. **Timeline: June 2010-January 2010.**

#### 10. Begin Next Large River Criteria Development

a. Likely to be on Missouri or another Yellowstone reach. **Timeline:**Possibly summer 2009, and then subsequent summers for other highpriority large rivers (priorities to be decided).